Jason H Steffen

List of Publications by Year
in descending order

79 papers	16,117 citations	47006 47 h-index	66911 78 g-index
79 all docs	79 docs citations	79 times ranked	5528 citing authors

#	Article	IF	Citations
1	Stellar evolution and tidal dissipation in REBOUNDx. Monthly Notices of the Royal Astronomical Society, 2022, 510, 6001-6009.	4.4	4
2	Collisional fragmentation and bulk composition tracking in <scp>rebound</scp>. Monthly Notices of the Royal Astronomical Society, 2022, 511, 1848-1859.	4.4	4
3	Pressure-driven symmetry transitions in dense <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:math> ice. Physical Review B, 2022, 105, .	3.2	9
4	MAGRATHEA: an open-source spherical symmetric planet interior structure code. Monthly Notices of the Royal Astronomical Society, 2022, 513, 5256-5269.	4.4	6
5	Maximum temperatures in evolving protoplanetary discs and composition of planetary building blocks. Monthly Notices of the Royal Astronomical Society, 2021, 503, 5254-5262.	4.4	4
6	Implications of an improved water equation of state for water-rich planets. Monthly Notices of the Royal Astronomical Society, 2021, 503, 2825-2832.	4.4	5
7	The Occurrence of Rocky Habitable-zone Planets around Solar-like Stars from Kepler Data. Astronomical Journal, 2021, 161, 36.	4.7	96
8	Dust condensation in evolving discs and the composition of planetary building blocks. Monthly Notices of the Royal Astronomical Society, 2020, 495, 2543-2553.	4.4	13
9	Survivability of moon systems around ejected gas giants. Monthly Notices of the Royal Astronomical Society, 2019, 489, 2323-2329.	4.4	5
10	Giant planet effects on terrestrial planet formation and system architecture. Monthly Notices of the Royal Astronomical Society, 2019, 485, 541-549.	4.4	18
11	Long-period Giant Companions to Three Compact, Multiplanet Systems. Astronomical Journal, 2019, 157, 145.	4.7	33
12	Dynamical instability and its implications for planetary system architecture. Monthly Notices of the Royal Astronomical Society, 2019, 484, 1538-1548.	4.4	28
13	Outcomes of Grazing Impacts between Sub-Neptunes in Kepler Multis. Astrophysical Journal, 2018, 852, 41.	4.5	32
14	The discovery and legacy of Keplerâ€™s multi-transiting planetary systems. New Astronomy Reviews, 2018, 83, 49-60.	12.8	2
15	Survival of non-coplanar, closely packed planetary systems after a close encounter. Monthly Notices of the Royal Astronomical Society, 2018, 481, 2205-2212.	4.4	28
16	TTV-determined Masses for Warm Jupiters and Their Close Planetary Companions. Astronomical Journal, 2018, 156, 96.	4.7	8
17	Systematic mischaracterization of exoplanetary system dynamical histories from a model degeneracy near mean-motion resonance. Monthly Notices of the Royal Astronomical Society, 2018, 480, 2846-2852.	4.4	21
18	Planetary Candidates Observed by Kepler . VIII. A Fully Automated Catalog with Measured Completeness and Reliability Based on Data Release 25. Astrophysical Journal, Supplement Series, 2018, 235, 38.	7.7	316

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19	Dynamics and collisional evolution of closely packed planetary systems. Monthly Notices of the Royal Astronomical Society, 2017, 470, 4145-4162.	4.4	30
20	TRANSIT TIMING OBSERVATIONS FROM KEPLER. IX. CATALOG OF THE FULL LONG-CADENCE DATA SET. Astrophysical Journal, Supplement Series, 2016, 225, 9.	7.7	158
21	Sensitivity bias in the massâ€“radius distribution from transit timing variations and radial velocity measurements. Monthly Notices of the Royal Astronomical Society, 2016, 457, 4384-4392.	4.4	66
22	KEPLER-1647B: THE LARGEST AND LONGEST-PERIOD KEPLER TRANSITING CIRCUMBINARY PLANET. Astrophysical Journal, 2016, 827, 86.	4.5	101
23	A Population of planetary systems characterized by short-period, Earth-sized planets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12023-12028.	7.1	45
24	A DYNAMICAL ANALYSIS OF THE KEPLER-80 SYSTEM OF FIVE TRANSITING PLANETS. Astronomical Journal, 2016, 152, 105.	4.7	115
25	DYNAMICAL CONSIDERATIONS FOR LIFE IN MULTI-HABITABLE PLANETARY SYSTEMS. Astrophysical Journal, 2016, 816, 97.	4.5	25
26	KEPLER 453 bâ€”THE 10thKEPLERTRANSITING CIRCUMBINARY PLANET. Astrophysical Journal, 2015, 809, 26.	4.5	130
27	PLANETARY CANDIDATES OBSERVED BY KEPLER . VI. PLANET SAMPLE FROM Q1â€“Q16 (47 MONTHS). Astrophysical Journal, Supplement Series, 2015, 217, 31.	7.7	234
28	The period ratio distribution of Kepler's candidate multiplanet systems. Monthly Notices of the Royal Astronomical Society, 2015, 448, 1956-1972.	4.4	91
29	PLANETARY CANDIDATES OBSERVED BY KEPLER . V. PLANET SAMPLE FROM Q1â€“Q12 (36 MONTHS). Astrophysical Journal, Supplement Series, 2015, 217, 16.	7.7	166
30	VALIDATION OFKEPLER'S MULTIPLE PLANET CANDIDATES. III. LIGHT CURVE ANALYSIS AND ANNOUNCEMENT OF HUNDREDS OF NEW MULTI-PLANET SYSTEMS. Astrophysical Journal, 2014, 784, 45.	4.5	418
31	ARCHITECTURE OFKEPLER'S MULTI-TRANSITING SYSTEMS. II. NEW INVESTIGATIONS WITH TWICE AS MANY CANDIDATES. Astrophysical Journal, 2014, 790, 146.	4.5	536
32	VALIDATION OFKEPLER'S MULTIPLE PLANET CANDIDATES. II. REFINED STATISTICAL FRAMEWORK AND DESCRIPTIONS OF SYSTEMS OF SPECIAL INTEREST. Astrophysical Journal, 2014, 784, 44.	4.5	182
33	MASSES, RADII, AND ORBITS OF SMALL KEPLER PLANETS: THE TRANSITION FROM GASEOUS TO ROCKY PLANETS. Astrophysical Journal, Supplement Series, 2014, 210, 20.	7.7	418
34	FROM HOT JUPITERS TO SUPER-EARTHS VIA ROCHE LOBE OVERFLOW. Astrophysical Journal Letters, 2014, 793, L3.	8.3	76
35	Kepler-62: A Five-Planet System with Planets of 1.4 and 1.6 Earth Radii in the Habitable Zone. Science, 2013, 340, 587-590.	12.6	213
36	Transit timing observations from Kepler â€“ VII. Confirmation of 27 planets in 13 multiplanet systems via transit timing variations and orbital stability. Monthly Notices of the Royal Astronomical Society, 2013, 428, 1077-1087.	4.4	174

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37	A LACK OF SHORT-PERIOD MULTIPLANET SYSTEMS WITH CLOSE-PROXIMITY PAIRS AND THE CURIOUS CASE OF KEPLER-42. Astrophysical Journal Letters, 2013, 774, L12.	8.3	55
38	PLANETARY CANDIDATES OBSERVED BY KEPLER . III. ANALYSIS OF THE FIRST 16 MONTHS OF DATA. Astrophysical Journal, Supplement Series, 2013, 204, 24.	7.7	823
39	Kepler's missing planets. Monthly Notices of the Royal Astronomical Society, 2013, 433, 3246-3255.	4.4	15
40	TRANSIT TIMING OBSERVATIONS FROM KEPLER . VIII. CATALOG OF TRANSIT TIMING MEASUREMENTS OF THE FIRST TWELVE QUARTERS. Astrophysical Journal, Supplement Series, 2013, 208, 16.	7.7	147
41	Transiting circumbinary planets Kepler-34 b and Kepler-35 b. Nature, 2012, 481, 475-479.	27.8	385
42	Dark matter and the habitability of planets. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 046-046.	5.4	28
43	Anomalous afterglow seen in a chameleon afterglow search. Physical Review D, 2012, 86, .	4.7	1
44	PLANET OCCURRENCE WITHIN 0.25 AU OF SOLAR-TYPE STARS FROM KEPLER. Astrophysical Journal, Supplement Series, 2012, 201, 15.	7.7	871
45	Kepler-36: A Pair of Planets with Neighboring Orbits and Dissimilar Densities. Science, 2012, 337, 556-559.	12.6	335
46	TRANSIT TIMING OBSERVATIONS FROMKEPLER. II. CONFIRMATION OF TWO MULTIPLANET SYSTEMS VIA A NON-PARAMETRIC CORRELATION ANALYSIS. Astrophysical Journal, 2012, 750, 113.	4.5	94
47	TRANSIT TIMING OBSERVATIONS FROMKEPLER. IV. CONFIRMATION OF FOUR MULTIPLE-PLANET SYSTEMS BY SIMPLE PHYSICAL MODELS. Astrophysical Journal, 2012, 750, 114.	4.5	199
48	TRANSIT TIMING OBSERVATIONS FROMKEPLER. V. TRANSIT TIMING VARIATION CANDIDATES IN THE FIRST SIXTEEN MONTHS FROM POLYNOMIAL MODELS. Astrophysical Journal, 2012, 756, 185.	4.5	75
49	Kepler-22b: A 2.4 EARTH-RADIUS PLANET IN THE HABITABLE ZONE OF A SUN-LIKE STAR. Astrophysical Journal, 2012, 745, 120.	4.5	218
50	Experimental test of airplane boarding methods. Journal of Air Transport Management, 2012, 18, 64-67.	4.5	82
51	Designing dark energy afterglow experiments. Physical Review D, 2012, 86, .	4.7	12
52	TRANSIT TIMING OBSERVATIONS FROMKEPLER. VI. POTENTIALLY INTERESTING CANDIDATE SYSTEMS FROM FOURIER-BASED STATISTICAL TESTS. Astrophysical Journal, 2012, 756, 186.	4.5	62
53	Kepler constraints on planets near hot Jupiters. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7982-7987.	7.1	172
54	Transit timing observations from Keplerâ€ƒ- III. Confirmation of four multiple planet systems by a Fourier-domain study of anticorrelated transit timing variations. Monthly Notices of the Royal Astronomical Society, 2012, 421, 2342-2354.	4.4	151

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55	KEPLER'S FIRST ROCKY PLANET: KEPLER-10b. Astrophysical Journal, 2011, 729, 27.	4.5	473
56	MODELINGKEPLERTRANSIT LIGHT CURVES AS FALSE POSITIVES: REJECTION OF BLEND SCENARIOS FOR KEPLER-9, AND VALIDATION OF KEPLER-9 d, A SUPER-EARTH-SIZE PLANET IN A MULTIPLE SYSTEM. Astrophysical Journal, 2011, 727, 24.	4.5	215
57	A FIRST COMPARISON OF KEPLER PLANET CANDIDATES IN SINGLE AND MULTIPLE SYSTEMS. Astrophysical Journal Letters, 2011, 732, L24.	8.3	167
58	THE KEPLER-19 SYSTEM: A TRANSITING 2.2R_{âŠ•}PLANET AND A SECOND PLANET DETECTED VIA TRANSIT TIMING VARIATIONS. Astrophysical Journal, 2011, 743, 200.	4.5	130
59	A closely packed system of low-mass, low-density planets transiting Kepler-11. Nature, 2011, 470, 53-58.	27.8	553
60	CHARACTERISTICS OFKEPLERPLANETARY CANDIDATES BASED ON THE FIRST DATA SET. Astrophysical Journal, 2011, 728, 117.	4.5	313
61	KOI-126: A Triply Eclipsing Hierarchical Triple with Two Low-Mass Stars. Science, 2011, 331, 562-565.	12.6	203
62	Kepler-16: A Transiting Circumbinary Planet. Science, 2011, 333, 1602-1606.	12.6	608
63	KEPLER-18b, c, AND d: A SYSTEM OF THREE PLANETS CONFIRMED BY TRANSIT TIMING VARIATIONS, LIGHT CURVE VALIDATION, WARM-SPITZER PHOTOMETRY, AND RADIAL VELOCITY MEASUREMENTS. Astrophysical Journal, Supplement Series, 2011, 197, 7.	7.7	171
64	TRANSIT TIMING OBSERVATIONS FROM KEPLER . I. STATISTICAL ANALYSIS OF THE FIRST FOUR MONTHS. Astrophysical Journal, Supplement Series, 2011, 197, 2.	7.7	98
65	ARCHITECTURE AND DYNAMICS OF KEPLER 'S CANDIDATE MULTIPLE TRANSITING PLANET SYSTEMS. Astrophysical Journal, Supplement Series, 2011, 197, 8.	7.7	593
66	CHARACTERISTICS OF PLANETARY CANDIDATES OBSERVED BYKEPLER. II. ANALYSIS OF THE FIRST FOUR MONTHS OF DATA. Astrophysical Journal, 2011, 736, 19.	4.5	859
67	FIVE KEPLER TARGET STARS THAT SHOW MULTIPLE TRANSITING EXOPLANET CANDIDATES. Astrophysical Journal, 2010, 725, 1226-1241.	4.5	91
68	THE CLIMATE OF HD 189733b FROM FOURTEEN TRANSITS AND ECLIPSES MEASURED BYSPITZER. Astrophysical Journal, 2010, 721, 1861-1877.	4.5	266
69	Kepler-9: A System of Multiple Planets Transiting a Sun-Like Star, Confirmed by Timing Variations. Science, 2010, 330, 51-54.	12.6	339
70	Kepler Asteroseismology Program: Introduction and First Results. Publications of the Astronomical Society of the Pacific, 2010, 122, 131-143.	3.1	370
71	Kepler Planet-Detection Mission: Introduction and First Results. Science, 2010, 327, 977-980.	12.6	2,848
72	THE GammeV SUITE OF EXPERIMENTAL SEARCHES FOR AXION-LIKE PARTICLES. Modern Physics Letters A, 2009, 24, 2053-2068.	1.2	21

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73	Optimal estimation of several linear parameters in the presence of Lorentzian thermal noise. Classical and Quantum Gravity, 2009, 26, 185009.	4.0	0
74	Constraints on the angular distribution of satellite galaxies about spiral hosts. Monthly Notices of the Royal Astronomical Society, 2008, 387, 1199-1205.	4.4	6
75	Optimal boarding method for airline passengers. Journal of Air Transport Management, 2008, 14, 146-150.	4.5	105
76	A statistical mechanics model for free-for-all airplane passenger boarding. American Journal of Physics, 2008, 76, 1114-1119.	0.7	40
77	An analysis of the transit times of TrES-1b. Monthly Notices of the Royal Astronomical Society: Letters, 2005, 364, L96-L100.	3.3	110
78	Optimal determination of the equilibrium displacement of a damped harmonic oscillator in the presence of thermal noise. Review of Scientific Instruments, 2005, 76, 085106.	1.3	2
79	EXPLORING FIFTH FORCE INTERACTIONS WITH 18TH CENTURY TECHNOLOGY. International Journal of Modern Physics D, 2004, 13, 2249-2254.	2.1	1